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CENTRAL INTELLIGENCE AGENCY REPORT NO. [redacted]

# INFORMATION REPORT

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COUNTRY East Germany

DATE DISTR. 21 September 1953

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THIS IS UNEVALUATED INFORMATION

SOURCE [redacted]

1. Bau Unionen Nord and Kueste were employed for the Ruegenhafen building project.[1] Spiess (fnu) was head of Bauunion Nord; Seidel (fnu) was labor manager; Pfeiffer (fnu) was managing engineer; Kaatsch (fnu) was commercial manager; Moeller (fnu) was chief bookkeeper; Grundmann (fnu) was chief economic manager; Schleicher (fnu) was head of the financial section; Kutz (fnu) was head of the material supply section; and Senst (fnu) was head of the personnel section.[2]

2. Bau Union Nord comprises nine building areas.

Construction Area I, headed by Wieghorst (fnu), built the west and east jetties northeast of Glowe; a refuge harbor west of the west jetty; and a concrete block factory. Since the bottom near the root of the jetty was formed of marl and clay, excavation work was difficult. For example, the G 19-type shovel dredge stuck in the bottom at the very beginning of the operations. Each jetty was adjoined by a building site projecting 100 meters landward. The roots of the two jetties which were built up with finished concrete components were concreted on the shoreside. The west side of the west mole was protected by a dam which, in places, was 1.5 meters above the water level and consisted of stones recovered from the sea.[3] A landing stage for the ten motor lighters which recovered the stone material was south of and parallel to this mole. A factory, 700 meters long and 600 meters wide, which was to make the concrete blocks for the jetties, was under construction close to the west jetty and between the two jetties, and was scheduled to be equipped with gantry cranes to lift the concrete blocks onto railroad cars which were to carry the blocks to the jetties for insertion by a transloading crane. The gantry cranes were ordered from the Beuchelt & Co firm in Koennern/Saale. The transhipment harbor for the building site in construction area I was near Weddeort and was a kind of ditch capable of berthing two tow barges side by side. Four unloading places, 7 to 8 meters wide, with a total length of 80 to 100 meters, were under construction. Barges which arrived with sand, gravel, cement and broken stones were unloaded with grab cranes. A track connected Weddeort harbor with the concrete block factory. Work on a road, connecting the roadbend near the Ruschwitz farm with the east jetty north of Baken-Berg, was started in March 1953 by the Tiefbau VEB in Berlin as a subcontractor of Bau Union Nord. Gear and materials starting arriving at the time of the observations. A standard-gauge

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line, branching off from Borchtitz to the east jetty was built by the Bau Union der Reichsbahn (National Railroad Construction Union). [4] A 250-man labor force and 160 convicts were employed in Construction Area I in late February 1953.

Construction Area II, for which Scheddin (fnu) is responsible, includes the canal from the jetty as far as the road to Bobbin-Glowe. Work is in progress.

Construction Area III, for which Pfeiffer II (fnu) is responsible, is the canal from the Bobbin-Glowe road as far as about the middle of the scheduled total length of the canal.

Construction Area IV, for which Albert-Schulz, formerly employed at the Brandenburg Bau Union, is responsible, is the canal from the section of Construction Area III as far as Jasmunder Bodden.

Construction Area V, is being organized and is scheduled to include the fishing harbor at the Jasmunder Bodden. [5]

Construction Area VI, is under the direction of Lehmann (fnu) and includes installations for the Ruegenhafen harbor project, such as huts, kitchens and similar operational buildings.

Construction Area VII, which is scheduled to build the residential town of Sagard, was dissolved as a section of the Construction Union Nord in late February 1953, and Bau Union Kueste was made responsible for the project.

Construction Areas VIII and IX are not yet set up.

3. The Glowe-Jasmunder Bodden Canal was planned to have a depth of 12 meters and a bottom width of 90 meters. Preliminary calculations indicated that a total of 5,000,000 cubic meters of bottom material had to be dredged, [6] since in some places, elevations would have to be worked. A Soviet-type stepping dredge, which was available for the dredging operations, in addition to the usual types of dredges could not yet be employed for lack of electric current lines. Components of a second stepping dredge had also arrived. [7]

25X1A 1. [redacted] Comment. Available information indicated that Bau Union Nord was employed exclusively for the Ruegenhafen building project. Bau Union Kueste was responsible for Sea Police buildings along the coast of East Germany.

25X1A 2. [redacted] Comment. Personnel chief Senst was replaced by Koentopp (fnu) in early March 1953.

25X1A 3. [redacted] Comment. The Ruegenhafen building project did not include the construction of a protective dam west of the west jetty. This dam possibly is a mole which will be removed after the building operations.

25X1A 4. [redacted] Comment. The railroad line from Borchtitz to the east jetty is part of the building project and is planned via a farm east of Polchow-Bobbin.

25X1A 5. [redacted] Comment. Fishing harbor is the designation of the various installations in the Polchow-Martinshafen area.

25X1A 6. [redacted] Comment. The Ruegenhafen project specified a width of the water level surface of 162 meters and embankments sloping 1:3 for the Glowe-Jasmunder Canal.

25X1A 7. [redacted] Comment. Attached in the Annex is a copy of a description of and technical data on, the stepping dredge.

## Stepping Dredge

Purpose:

Digging of canals of any width and a maximum depth of 19.7 meters and laying bare and extracting the soil in open cast operations.

Description: The stepping dredge is a dragline bucket dredge named after its particular kind of locomotion, for which the conventional track laying chains of rails are superseded by stepping skids driven by electrical motors.

Under operation, the dredge bucket with its cutting teeth is moved toward the dredge cabin and is simultaneously filled. As a rule, it is emptied after the superstructure of the dredge has executed a sideward movement during which the full bucket is moved toward the tip of the cantilever arm and, after reaching its extreme position, is placed in a vertical position by slackening the dragline. The movement of the bucket is controlled by a lift and draw winch.

The stepping mechanism of the dredge consists of a large toothed wheel which is fixed to the step shaft across the rotary part of the dredge and which moves two eccentrics mounted in an oval frame, to which the step skids are attached. The two step skids are pressed on the ground by the eccentric movement in forward motion, while the engine cabin with the bucket is simultaneously pushed forward and placed on the ground. The step skids thus execute a forward step, with the weight of the dredge alternately shifted from the step skids to the bottom plate. A change of direction is effected by turning the superstructure of the dredge while the step skids are lifted. The dredge can thus be moved in any direction by direct control from its driving stand and is capable of taking sharp bends without damaging the ground, since any sliding movement under the skids is avoided.

As they are hinged to the frame of the eccentrics, the step skids can be adapted to lateral differences of the ground level and thereby fairly well distribute the weight of the dredge to the supporting surfaces.

The dredge is operated by two men.

### Technical Characteristics

| | |
|---|---|
| Equipment | dragline |
| Motion of dredge | stepping |
| Bucket capacity | 3.4 cubic meters |
| Length of beam | 38 meters |
| Angle of inclination of beam | 35 degrees |
| Maximum ditch radius | 48 meters |
| Maximum dredging depth | 19.8 meters |
| Maximum height of unloading | 17.1 meters |
| Maximum radius of unloading | 36 meters |

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| Speed of dragline | 0.93 meters |
| Speed of lift rope | 1.06 meters |
| Nominal pulling power at dragline | 25.5 tons |
| Pulling power at dragline with double moment of electrical motor | 50.4 tons |
| Mean step length | 1.83 meters |
| Mean walking speed | 330 miles per hour (sic) |
| Full operating weight of dredge with empty buckets | 164 tons |
| including | |
| designed weight with electrical equipment | 144 tons |
| counterweight | 20 tons |
| Mean specific pressure on ground surface (base) | 0.4 kg per sq. cm |
| Duration of cycle of operation with a rotating angle of 180 degrees | about 1 minute |

Kind of electrical current: three phase current 380 or 6,000 Volt

Driving power:

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| Main Motor | 220 kw 750 r.p.m. |
| Spur wheel transmission | 1 : 10 |
| Slewing motor | 70 kw 1,000 r.p.m. |
| Spur wheel transmission | 1 : 43.5 |
| Beam winch motor | 3.3 kw 960 r.p.m. |
| Spur gear and worm gear drive | 1 : 500 |
| Compressor motor | 10 kw 970 r.p.m. |
| V-belt transmission | 1 : 3.1 |
| Generator motor for three phase current | 12 kw 1,430 r.p.m. |
| Direct current generator | 13 kw 1,430 r.p.m. 48 Volt |

| Weight in tons | | | | | |
|---|---|---|---|---|---|
| Total weight of dredge without electrical equipment | Gray casting | Steel casting | NF-metal | Forged pieces | Rolled material-steel |
| 153 | 20 | 18 | 0.6 | 11 | 87.6 |

| Steel alloy | Roller bearing | Small iron components |
|---|---|---|
| 9 | 0.25 | 5.75 |